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MODEL INDOOR AIR QUALITY ACT

SECTION 1. Short title.

This act may be cited as the "Indoor Air Quality Act."

SECTION 2. Declaration of policy and intent.

The legislature finds and declares:

(1) Scientific studies and building investigations reveal that poor indoor air quality (IAQ) is responsible for occupant complaints and that of these complaints, the majority are associated with poor ventilation.

(2) On the average, people spend at least 90 percent of their time indoors, and, as a result, the population has a significant potential for exposure to indoor air quality problems.

(3) The composition of indoor air may include chemical and biological substances that have been related to illness or discomfort in persons who are exposed to the indoor air.

(4) Energy saving features and aging, poorly maintained heating, ventilating and air conditioning systems in many buildings have substantially reduced the outdoor air exchange or otherwise contributed to increased concentrations of air pollutants in those structures.

(5) Existing state environmental and occupational health programs do not adequately protect the public from exposure to poor indoor air quality that may occur in public areas or office workplaces.

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2 (6) Indoor air quality problems are not easily  
3 definable nor are specific health effects easily quantifiable.

4 (7) It is in the public interest to reduce exposure  
5 to poor indoor air quality by developing a comprehensive  
6 program to address the requirements for indoor air quality  
7 in public and private buildings, schools, health care  
8 facilities, offices and commercial establishments, and to  
9 educate the public regarding indoor air quality issues. In  
10 so doing, it is in the public interest to pursue an overall,  
11 building systems approach to indoor air quality.

12 SECTION 3. Definitions

13 For the purposes of this Act, the following terms mean:

14 (1) "Building," a structure of greater than twenty-  
15 five thousand square feet of floor space, of two (2) or more  
16 floors, using mechanical ventilation providing outdoor air,  
17 recirculated air or a mixture of outdoor and recirculated  
18 air, in which two (2) or more persons work, convalesce or  
19 otherwise occupy for a period of one (1) hour or more during  
20 any twenty-four (24) hour period. "Building" includes public  
21 buildings and non-industrial, non-residential workplaces;

22 (2) "Building owner," any individual, partnership,  
23 corporation, state, county, city, town or village that owns  
24 the freehold of a premises or any lesser estate therein, a  
25 mortgagee or vendee in possession, a contract vendee, assignee  
26 of rents, receiver, executor, trustee, lessee or any other

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2 person firm or corporation in control of a building containing  
3 commercial establishments or public places covered by this  
4 act, or the agent of such person(s) (e.g. building manager  
5 or facility manager or other person who has control of the  
6 workplace);

7 (3) "Department," any state agency or department  
8 having regulatory jurisdiction over indoor air quality in the  
9 workplace or in public buildings;

10 (4) "Director," director of the Office of Indoor Air  
11 Quality of the Department;

12 (5) "Employer," any person or entity which employs  
13 employees and operates a workplace in this state;

14 (6) "HVAC system," the collective components of the  
15 heating, ventilation and air conditioning system for any  
16 indoor space;

17 (7) "Indoor," enclosed portions of buildings;

18 (8) "IAQ effect," any complaint that involves an  
19 identifiable symptom such as headache, nausea, respiratory  
20 illness, skin and/or eye irritation, "multiple chemical  
21 sensitivity," fatigue, dizziness, etc.;

22 (9) "Proprietor," the owner, manager, operator,  
23 employer or other person, corporation, association or  
24 partnership in charge of a workplace;

25 (10) "Public area," any enclosed indoor area used  
26 by the general public, including, but not limited to,

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1 educational facilities, health facilities, libraries, hotels,  
2 motels, apartment buildings, meeting rooms, auditoriums,  
3 arenas, theaters, museums, restaurants, and concert halls;  
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5 (11) "Workplace," that portion of any enclosed,  
6 indoor area in which members of the general public are not  
7 permitted.

8 SECTION 4. Office of Indoor Air Quality.

9 (a) There is hereby established within the Department, an  
10 Office of Indoor Air Quality. It shall be the duty of such  
11 office to:

12 (1) Administer a comprehensive, well-defined and  
13 coordinated program designed to reduce the seriousness and  
14 extent of indoor air quality problems, and the technological  
15 and other methods of reducing human exposure to poor indoor  
16 air quality;

17 (2) Establish a process whereby the existing  
18 authorities will be directed and focused to assure the full  
19 and effective application of these authorities to reduce  
20 human exposure to poor indoor air quality where appropriate;  
21 and

22 (3) Authorize activities to assure the general  
23 coordination of indoor air quality-related activity, to  
24 provide for investigations or evaluations of indoor air  
25 quality in specific buildings, to provide training,  
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2 education, information, and technical assistance to the public  
3 and private sector, and for other purposes.

4 SECTION 5. Director of Indoor Air Quality.

5 The Governor with the advice and consent of the  
6 Legislature shall appoint a Director of Indoor Air Quality.  
7 The Department shall provide such clerical, technical and  
8 professional assistance as shall be necessary to effectuate  
9 the purposes of this act and may use any federal or nonprofit  
10 funds available to aid in the administration of this act.

11 SECTION 6. Public information program.

12 Subject to available funds, the Director may establish a  
13 public information program to educate the public on indoor  
14 air quality, and on effective, practical methods for  
15 preventing, detecting and correcting the causes of poor indoor  
16 air quality.

17 SECTION 7. Building investigations and scientific studies.

18 Subject to available funds, the Director may conduct  
19 building investigations and scientific studies to analyze  
20 and quantify the extent of poor indoor air quality in selected  
21 buildings with indoor air quality problems. Building  
22 investigations shall be conducted in a manner that does not  
23 compete with the business of private contractors. Comparative  
24 scientific studies may be conducted to look further for the  
25 causes of indoor air quality problems, especially where

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1 national information on significant potential problems is  
2 lacking.

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4 SECTION 8. Public certification program for compliance.

5 (a) The Department shall establish by rule a public  
6 certification program for workplaces, buildings, or public  
7 areas that consistently meet the indoor air quality  
8 requirements of this act. Any workplace, building or public  
9 area that qualifies for such recognition may display a notice  
10 indicating that the building meets or exceeds the requirements  
11 of the state's indoor air quality statute.

12 (b) To qualify for certification under this section, a  
13 workplace, building or public area shall:

14 (1) Comply with all applicable provisions of this  
15 act; and

16 (2) Demonstrate a consistent pattern of compliance  
17 in meeting all indoor air quality standards and other  
18 requirements of this act.

19 (c) The Department by rule may establish a fee to be  
20 submitted by the owner or responsible party of a workplace,  
21 building or public area who requests certification under  
22 this section. The fee shall be an amount sufficient to pay  
23 the Department's costs in carrying out the provisions of  
24 this section.

25 (d) It is a defense in a civil action brought for damages  
26 for injury caused by the alleged harmful effects of poor

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1 indoor air quality that the building owner, employer,  
2 proprietor or qualified HVAC system operator complied in  
3 good faith, without negligence or misconduct, with the air  
4 quality standards established by the Department, and the  
5 ventilation, testing and maintenance requirements adopted  
6 under this act.

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8 SECTION 9. HVAC systems.

9 (a) The recognized standards of the American Society of  
10 Heating, Refrigerating and Air Conditioning Engineers, Inc.,  
11 known as ASHRAE 55-1981 (Thermal Environmental Conditions  
12 for Human Occupancy) and ASHRAE 62-1989 (Ventilation for  
13 Acceptable Indoor Air Quality), are hereby adopted as  
14 standards for evaluating indoor air quality in all buildings  
15 or portions of buildings subject to this act.

16 (b) Every building owner, employer or proprietor shall  
17 use all reasonable efforts to maintain and operate HVAC  
18 systems during all work shifts to provide adequate ventilation  
19 in compliance with the ASHRAE standards adopted in part (a)  
20 of this subsection. Relative humidity should be maintained  
21 below 60% in any season to prevent and reduce the growth of  
22 biological contaminants.

23 (c) Maintenance and Performance Testing.

24 (1) Every building owner, employer or proprietor  
25 should identify a qualified person(s) (e.g. contractor,  
26 company, agency, or department) to be responsible for the

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1 operation and maintenance of the HVAC system and to conduct  
2 periodic performance testing. The qualified person(s)  
3 identified for these tasks should be knowledgeable in the  
4 principles of HVAC system operation and maintenance, HVAC  
5 testing procedures, the requirements of the ASHRAE standards  
6 and the specific HVAC system serving the building or office.

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8 (2) HVAC system components should be inspected and  
9 replaced, cleaned, or calibrated as specified by current  
10 design specifications or manufacturer recommendations. These  
11 components include, but are not limited to, filters, drip  
12 pans and drainage piping, heating and cooling coils,  
13 supply/exhaust vents and louvers, motor belts, humidifiers,  
14 air cleaners, and thermostats. Damaged or inoperable  
15 components should be replaced or repaired as appropriate.  
16 Additionally, any reservoirs or parts of this system with  
17 standing water should be checked for microbial growth.

18 (3) Inspection and maintenance procedures should be  
19 documented by records, logs, or appropriate seals affixed  
20 directly to HVAC system components.

21 (4) HVAC performance testing should be conducted and  
22 repeated at regularly scheduled intervals sufficient to  
23 confirm that the ventilation system(s) works as designed,  
24 and performance meets specifications under the full range of  
25 building operating conditions. Building owners, employers  
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1 or proprietors should maintain adequate documentation of  
2 such testing.

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4 SECTION 10. Evaluation of Indoor Air Quality Problems.

5 (a) Building owners, employers and proprietors shall  
6 adopt procedures to document and address indoor air quality  
7 problems or complaints from employees or other building  
8 occupants. A written outline of these procedures shall be  
9 available to employees, occupants and the Department.

10 (b) Following the receipt of complaints about indoor air  
11 quality by three or more employees or occupants, the building  
12 owner, employer, proprietor or the person(s) responsible for  
13 the maintenance and operation of the building and/or HVAC  
14 system, shall evaluate the indoor air problem and take action,  
15 if necessary. Such evaluation and action may include an  
16 indoor air quality assessment to identify the nature of the  
17 indoor air complaints, HVAC system inspection, maintenance,  
18 adjustments, cleaning, or other actions deemed appropriate  
19 to resolve the problem.

20 (c) If the condition persists or if the building owner,  
21 employer or proprietor fails to respond to a complaint filed  
22 by three or more employees or occupants, an employee or  
23 occupant may request further action by notifying the  
24 Department in writing. No employee shall be penalized by an  
25 employer in any way as a result of such employee's filing of

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1 a complaint or otherwise providing notice to the Department  
2 in regard to indoor air quality and ventilation standards.

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4 (d) Where the Department, upon investigation, has reason  
5 to believe that a building or a portion of a building does  
6 not provide for adequate indoor air quality when measured  
7 against the standards adopted in this act, then the  
8 Department may require the building owner, employer or  
9 proprietor to perform a comprehensive ventilation and  
10 temperature evaluation in accordance with those standards.  
11 The Department may additionally require the building owner,  
12 employer or proprietor to obtain and furnish to the  
13 Department, at the building owner's, employer's or  
14 proprietor's expense, a report from a licensed engineer or  
15 registered architect or certified industrial hygienist or  
16 other person with similar qualifications, education, or  
17 experience who can demonstrate the ability to perform indoor  
18 air quality evaluations. The report must outline appropriate  
19 corrective measures to the building or portions of the  
20 building under investigation. Where retrofit is found to be

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2 time of enactment of this act, to bring into conformity with  
3 these adopted standards. These standards are adopted in  
4 order to provide a nationally recognized objective  
5 measurement tool for the evaluation and retrofit of buildings  
6 or portions of buildings which exhibit indoor air quality  
7 deficiencies.

8 SECTION 11. Controls for specific air pollutant sources.

9 (a) Renovation work, new construction, cleaning operations  
10 and pesticide applications that result in the diffusion of  
11 dust, stone and other small particles, toxic gases or other  
12 harmful substances in quantities hazardous to health shall  
13 be safeguarded by means of local ventilation or other  
14 protective devices to insure the safety of employees and the  
15 public. Renovation areas in occupied buildings shall be  
16 isolated and dust and debris shall be confined to the  
17 renovation or construction area. Following completion of  
18 construction or renovation work, the building owner, employer  
19 or proprietor shall ensure that appropriate measures are  
20 taken to allow materials to offgas prior to occupancy.

21 (b) Before use of paints, adhesives, sealants, solvents,  
22 or installation of insulation, particle board, plywood, floor  
23 coverings, carpet backing, textiles or other materials in  
24 the course of renovation or construction, the building owner,  
25 employer, proprietor or hired contractor shall check product  
26 labels or seek and obtain information from the manufacturers

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1 of those products on whether or not they contain volatile  
2 organic compounds such as solvents, formaldehyde or  
3 isocyanates that could be emitted during regular use. This  
4 information shall be used to select products and to determine  
5 necessary measures, if any, to be taken to comply with this  
6 section.  
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8 (c) Direct entry or infiltration of odors, fumes, vehicle  
9 exhaust, and other air pollutants through outdoor air intakes;  
10 intentional openings in the building shell such as loading  
11 docks, stairwells, elevator shafts or other openings; and  
12 unintentional openings in the building shell such as around  
13 doors, windows, utility entrances, cracks and holes; shall  
14 be prevented by engineering controls or architectural design.

15 (d) Re-entrainment into the building of pollutants from  
16 building exhausts, plumbing vents, drain piping, etc. shall  
17 be prevented by engineering controls.

18 (e) The building owner, employer or proprietor shall  
19 ensure that the operation and maintenance of equipment,  
20 activities, and processes that have the potential to produce  
21 indoor air pollutants are being operated and maintained  
22 properly.

23 (f) The building owner, employer or proprietor, as  
24 appropriate, shall control biological contamination by  
25 promptly replacing or properly cleaning porous materials  
26 that have been moisture damaged. In addition, visible moss,

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1 mold or algae shall not be growing in ductwork, humidifiers  
2 or other HVAC system components.

3 SECTION 12. Formal complaint procedure.  
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5 (a) Building-related and indoor air quality complaints  
6 may be reported to the Department as follows:

7 (1) The employee or occupant shall notify the  
8 Department in writing of the grounds for the complaint. All  
9 relevant documents shall accompany the complaint.

10 (2) Within five working days from the receipt of the  
11 complaint, the Department shall notify the building owner,  
12 employer or proprietor that a complaint has been filed.  
13 Upon the request of the employee or occupant, the  
14 complainant's name shall be withheld from the notice to the  
15 building owner, employer or proprietor.

16 (3) The Department shall investigate and determine  
17 the nature and extent of the problem. The investigation  
18 shall be conducted in accordance with the standards adopted  
19 in this act.

20 (i) If the extent of the problem indicates, the  
21 Department shall determine and order the building owner,  
22 employer or proprietor to have a qualified expert investigate  
23 the alleged indoor air quality problem. If the study is  
24 contracted for by the building owner, employer or proprietor,  
25 it shall report the results in writing to the Department  
26 within five working days of receipt.

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2 (ii) Where the Department, in its sole  
3 discretion, determines that an engineering evaluation of the  
4 building or portion of a building and its mechanical systems  
5 is warranted, then the building owner, employer or proprietor  
6 shall, at its expense, provide for such engineering evaluation  
7 as the Department determines is necessary and shall report  
8 the results in writing to the Department within five working  
9 days of receipt.

10 (4) If remedial action is indicated by the  
11 investigation, the Department shall ensure that such remedial  
12 action is completed.

13 (5) A complete record of this investigation shall be  
14 kept by the Department for five years.

15 SECTION 13. Appeals of Department decisions.

16 (a) Whenever the Department shall act as the enforcing  
17 agency, appeals and hearings shall be governed by the  
18 provisions of the [Administrative Procedure Act]. A final  
19 decision shall be issued by the Director of the Department.

20 (b) Appeals may be made by the complainant or the building  
21 owner, employer or proprietor as defined in this act.

22 (c) The application for appeal shall be taken within  
23 twenty business days of the receipt of written notice of the  
24 Department's decision.

25 (d) The application for appeal shall be in writing,  
26 briefly setting forth the appellant's position. Such

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1 application shall state the name and address of the appellant,  
2 the address of the building or site in question and shall  
3 reference the specific sections of the rules in question,  
4 and the extent and nature of the appellant's reliance on  
5 them. The appellant may append to his or her written  
6 application any data or information that is deemed  
7 appropriate to the cause.  
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9 SECTION 14. Promulgation of regulations.

10 The Department shall promulgate regulations necessary to  
11 carry out the provisions of this act.

12 SECTION 15. Emergency powers.

13 The director, upon determination that a serious indoor air  
14 pollution condition exists in a workplace, building, or public  
15 area with significant IAQ effects impacting upon at least  
16 half of the occupants thereof may order any such site to be  
17 closed by way of the issuance of a cease and desist order  
18 enforceable in the appropriate courts of the state.

19 SECTION 16. Penalties.

20 (a) Any building owner, employer or proprietor who  
21 violates the requirements of this act may be assessed a civil  
22 penalty of not more than \$5,000. In assessing such a civil  
23 penalty, the director shall consider:

- 24 (1) The number of persons exposed to the violation;  
25 (2) The likely severity of any injuries resulting  
26 from such violation;

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1 (3) The probability that the violation could result  
2 in injury or illness;

3 (4) Previous violations of the building owner,  
4 employer or proprietor;

5 (5) The good faith of the building owner, employer  
6 or proprietor in dealing with the violation; and

7 (6) The effect of the penalty on the building  
8 owner's, employer's or proprietor's ability to stay in  
9 business.

10 (b) The director may apply a multiplier of not greater  
11 than ten to the penalty determined under subsection (a) under  
12 the following circumstances:

13 (1) Where violations involve fatalities or serious  
14 physical injuries;

15 (2) There is an excessive history or pattern of  
16 violations of the act which cause or are likely to cause  
17 death or serious physical injury; or

18 (3) The violations involve an extreme degree of  
19 gravity or other unique aggravating circumstance.

20 (c) Minor violations of this act may be censured by a  
21 suitable written notice or warning.

22 SECTION 17. Severability.

23 If any provision, clause or paragraph of this act shall  
24 be held invalid by a court of competent jurisdiction, such  
25 validity shall not affect the other provisions of the act.  
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2 SECTION 18. Preemption.

3 This act preempts a county, city, town or other  
4 governmental unit from adopting any ordinance concerning  
5 indoor air quality.

6 SECTION 19. Effective date.

7 This act shall take effect one year after it shall have  
8 become law.  
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